

BEST AVAILABLE COPY

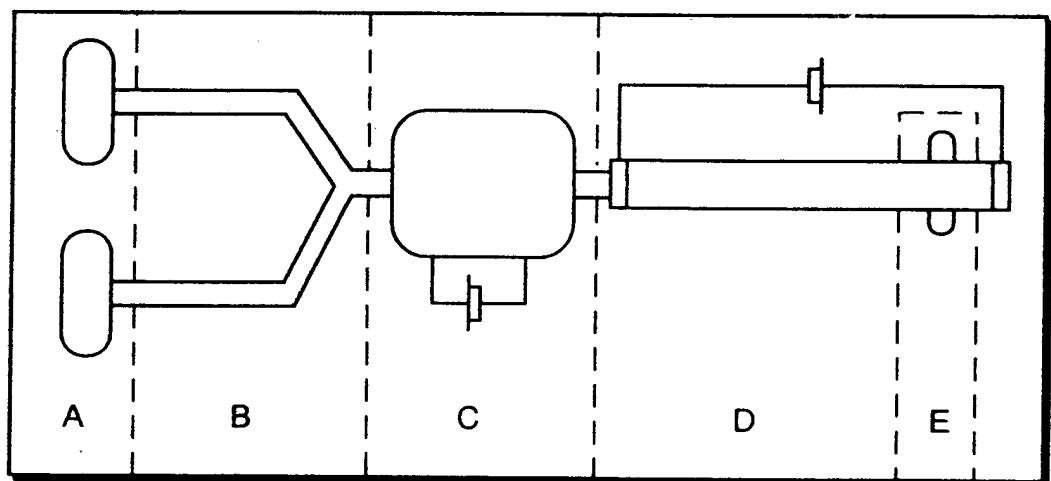


FIG. 1

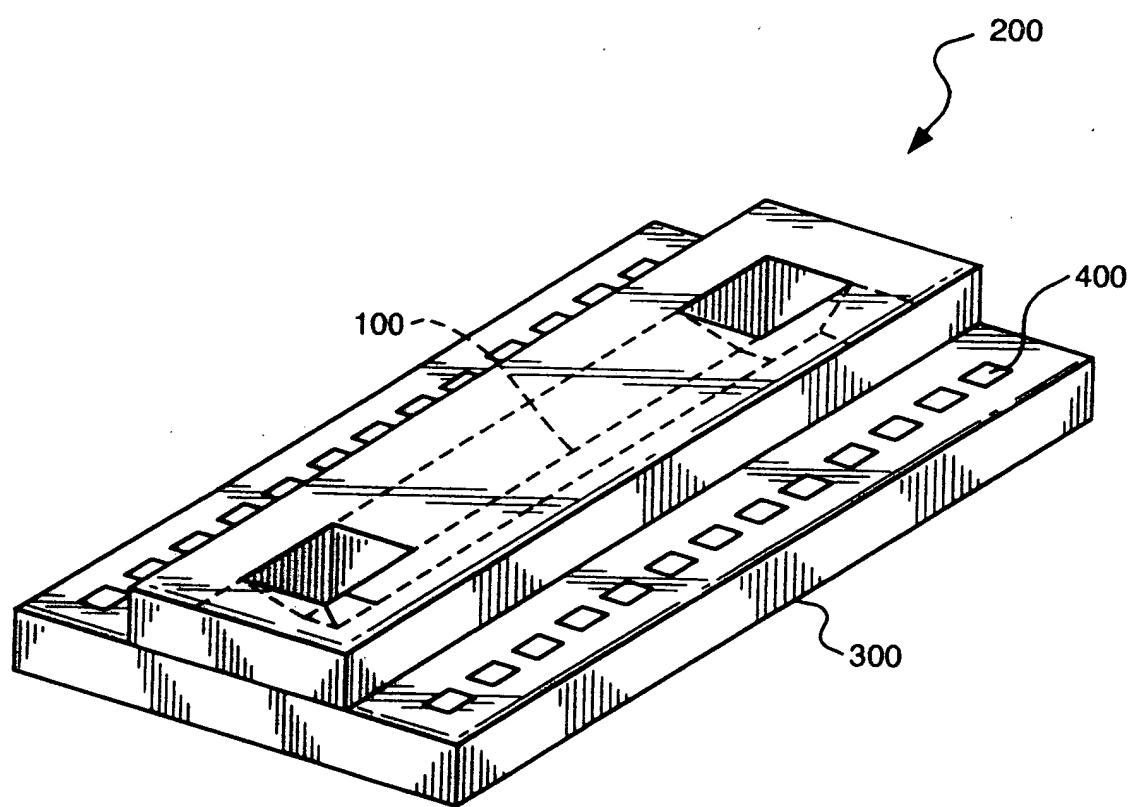


FIG. 2

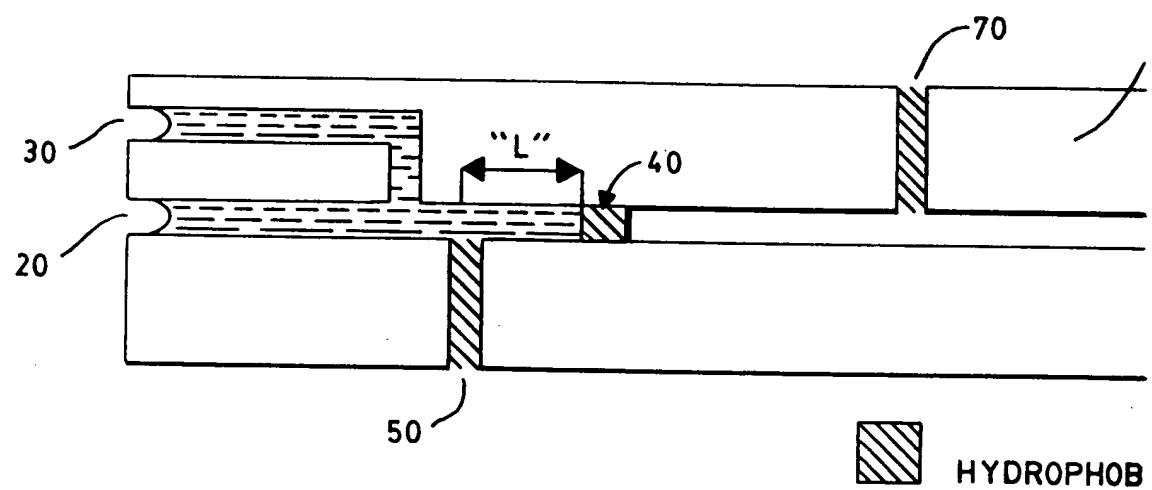


FIG. 3A



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 4 of 33

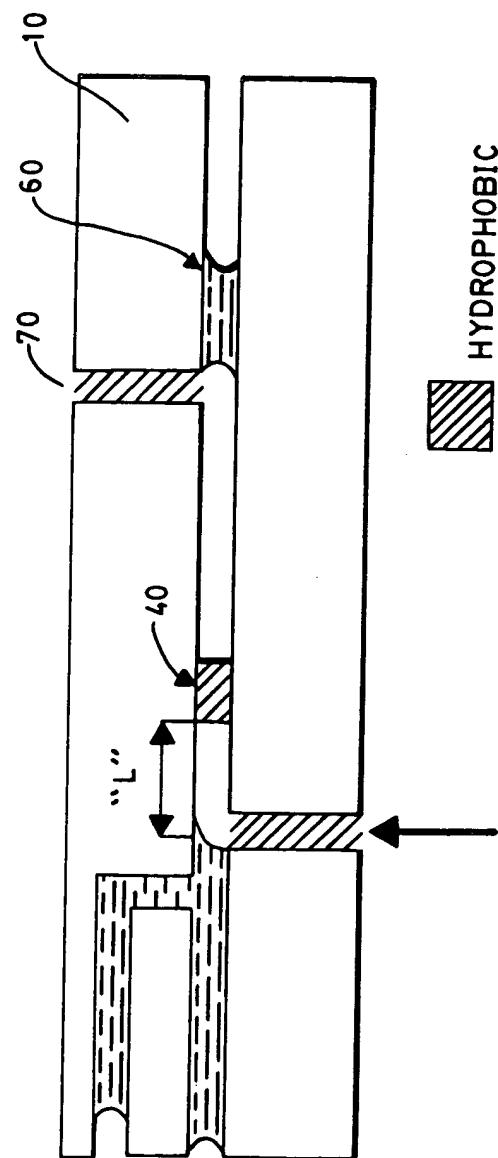


FIG. 3B

NOV 02 2004
PATENT & TRADEMARK OFFICE

Serial No.: 09/518,895 Filed: 05/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 5 of 33

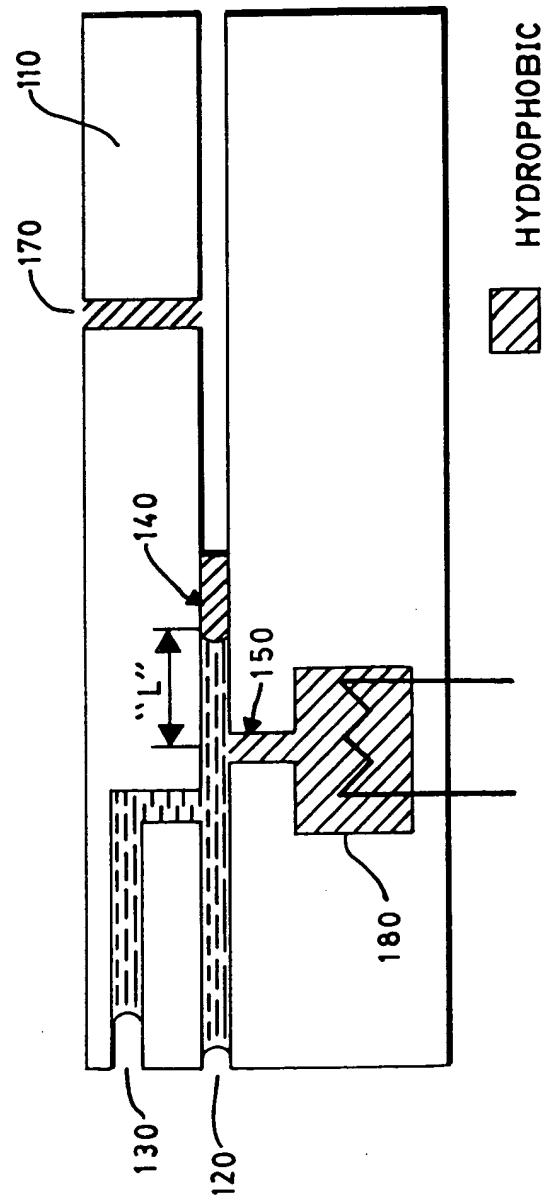


FIG. 4A



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 6 of 33

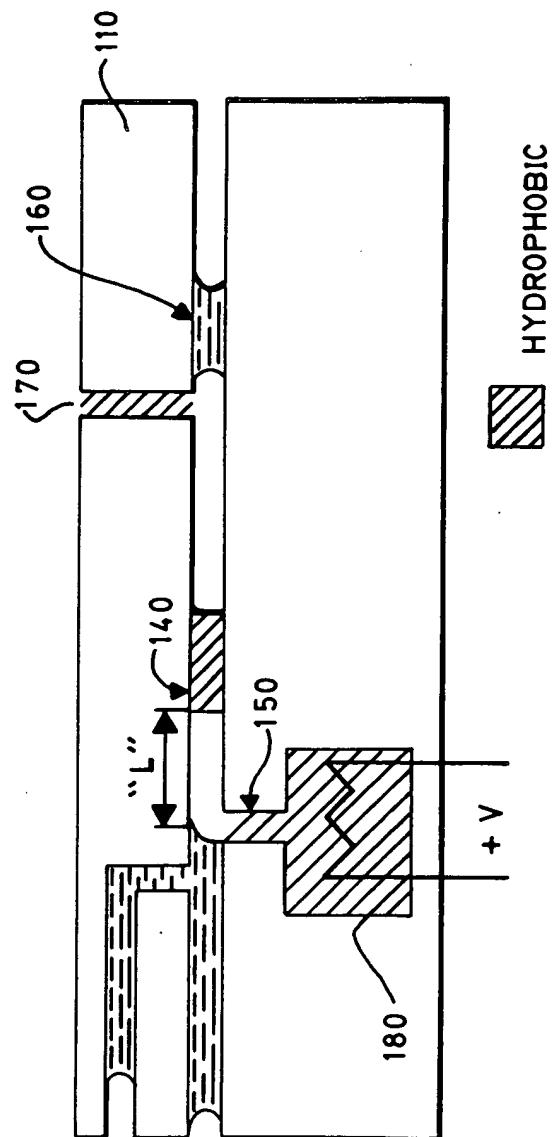
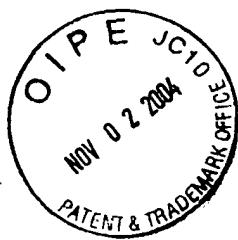


FIG. 4B



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 7 of 33

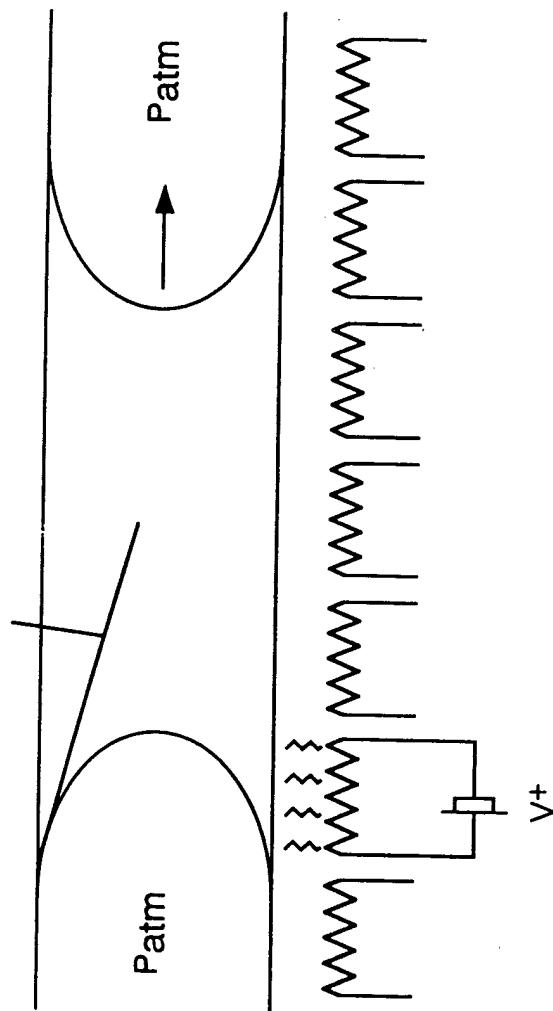
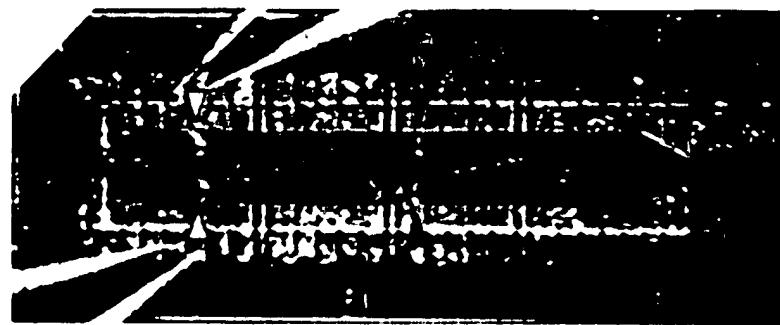
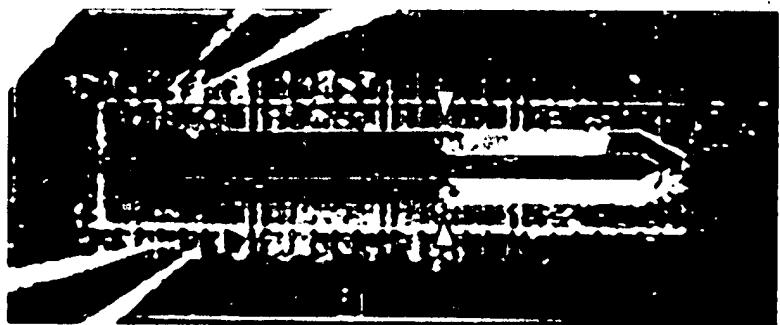
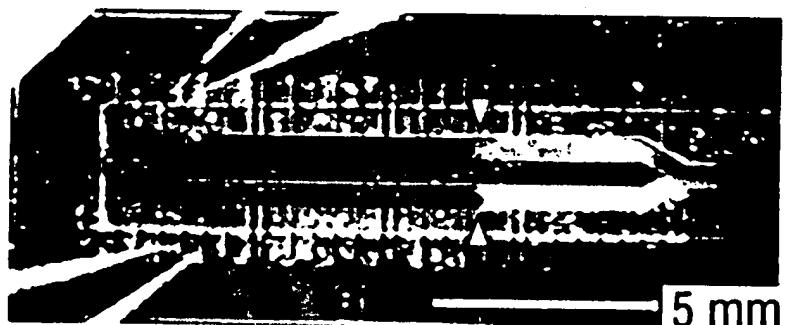
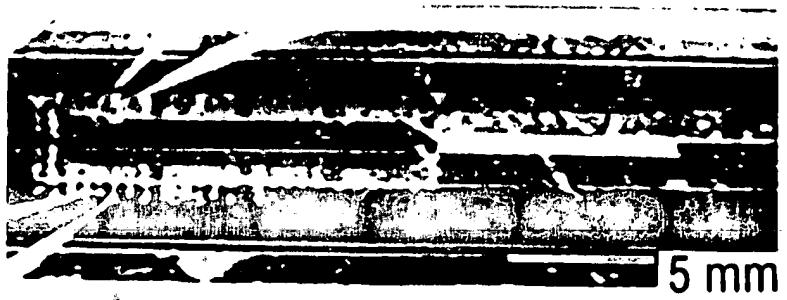


FIG. 5

FIG. 6A**FIG. 6B****FIG. 6C****FIG. 6D**

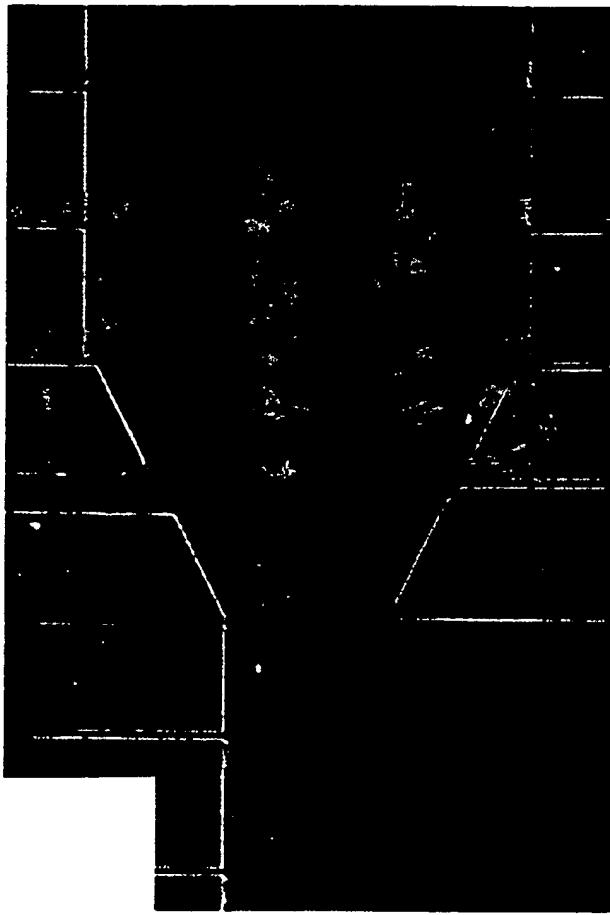


FIG. 7A

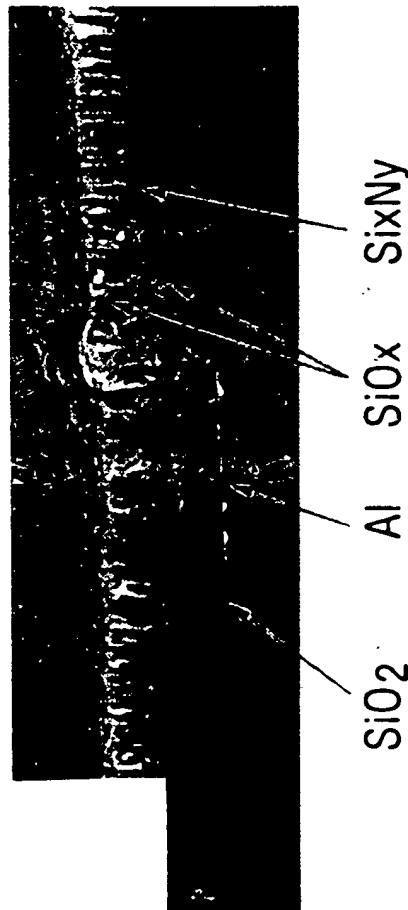


FIG. 7B



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 10 of 33

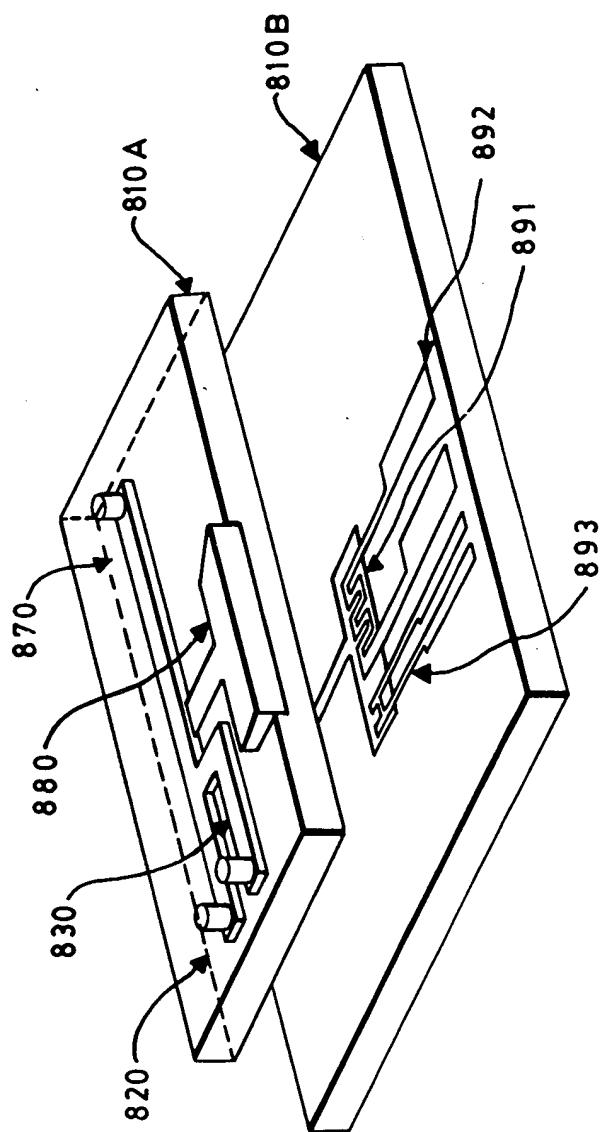


FIG. 8A



Serial No.: 09/518,895 Filed: 03/06/00
 Examiner: J. Ludlow Group Art Unit: 1743
 Applicant: Kalyan Handique *et al.*
 Title: **Moving Microdroplets**
 Atty. Docket No.: UM-04228 Sheet 11 of 33

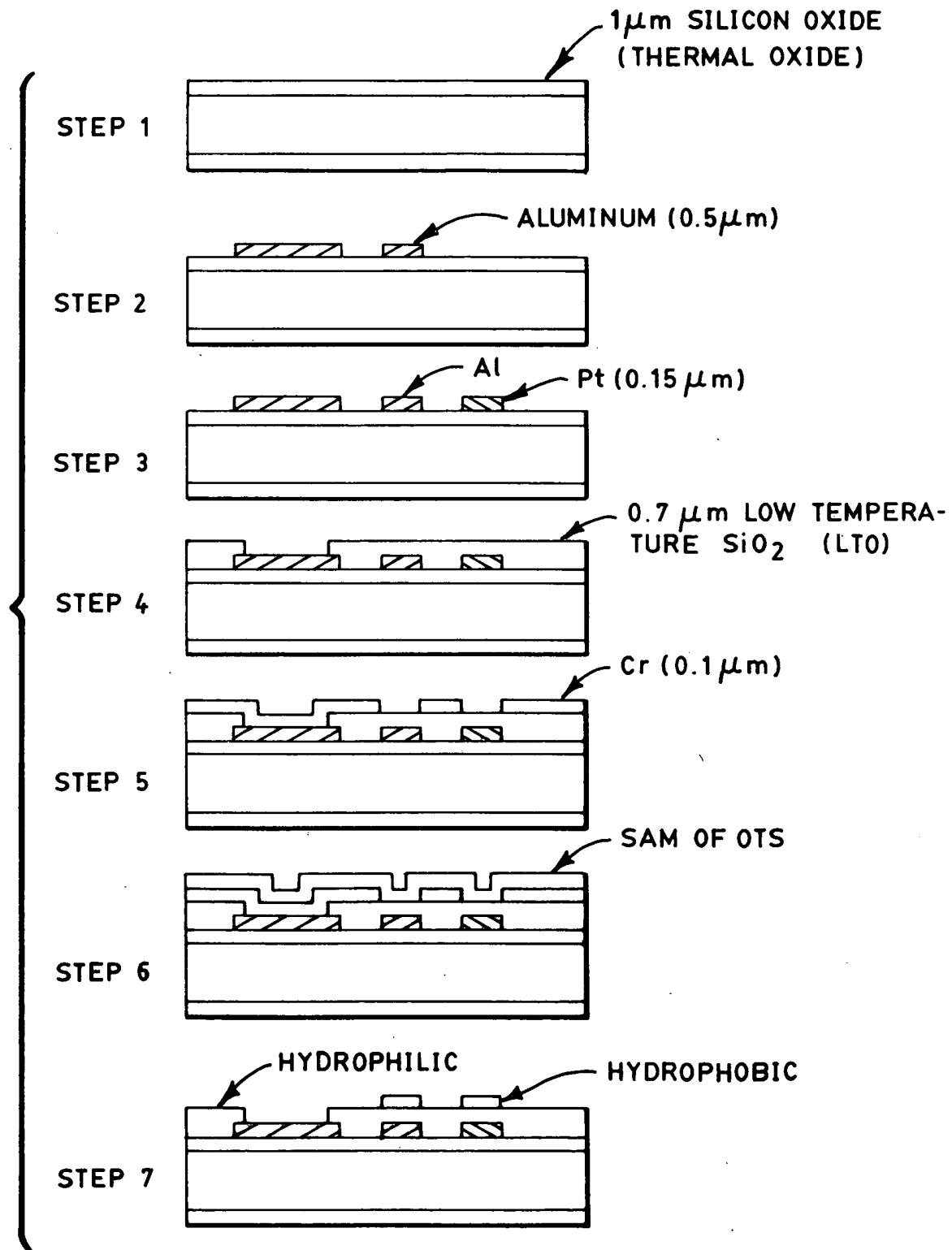


FIG. 8B



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 12 of 33

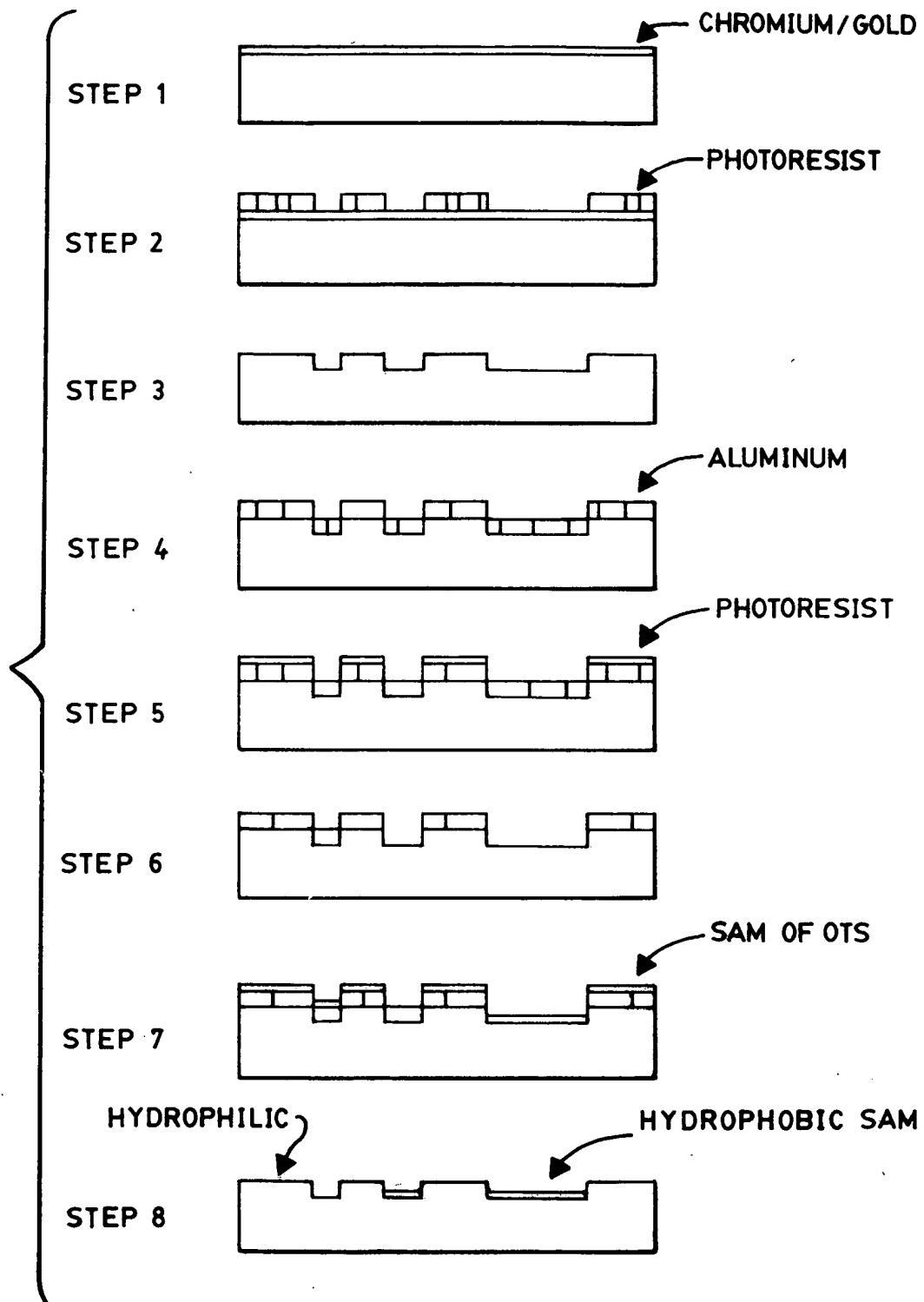


FIG. 8C

110204

8351 U.S. PTO

Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 13 of 33

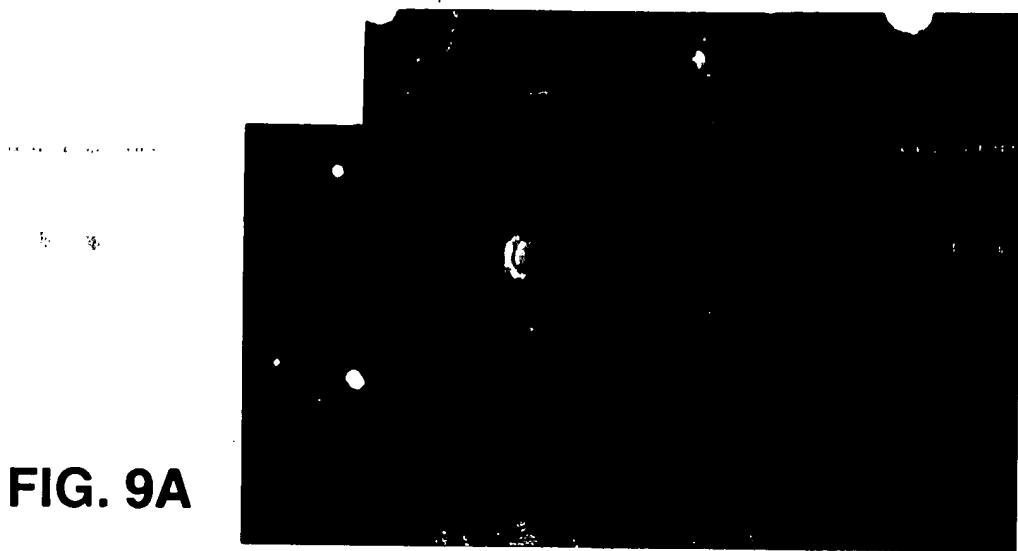


FIG. 9A

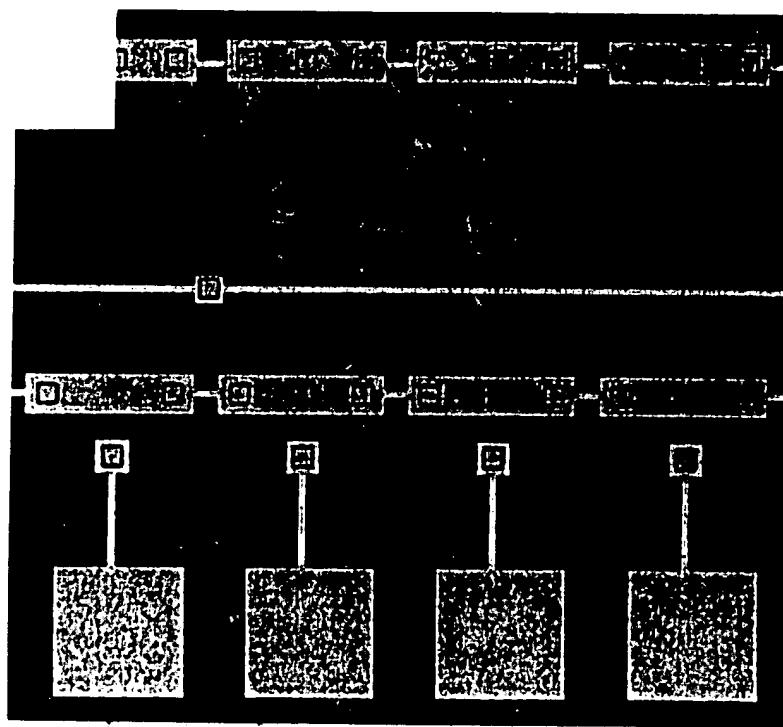


FIG. 9B

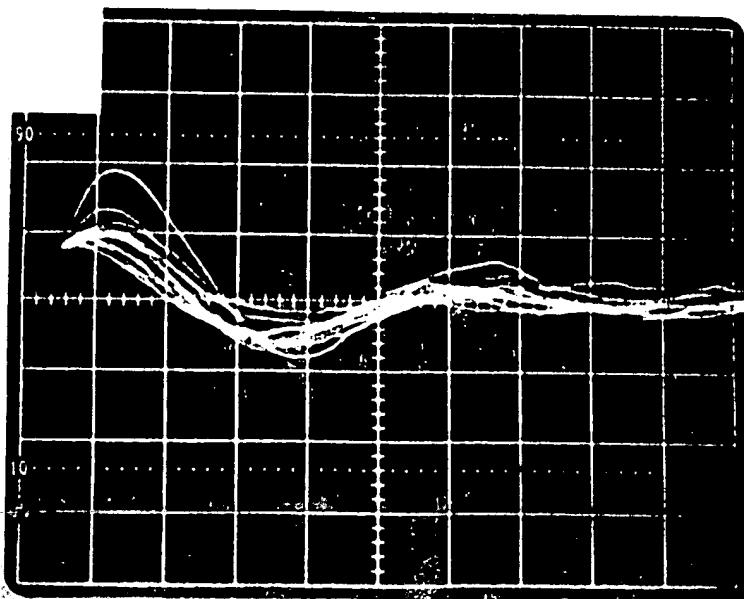


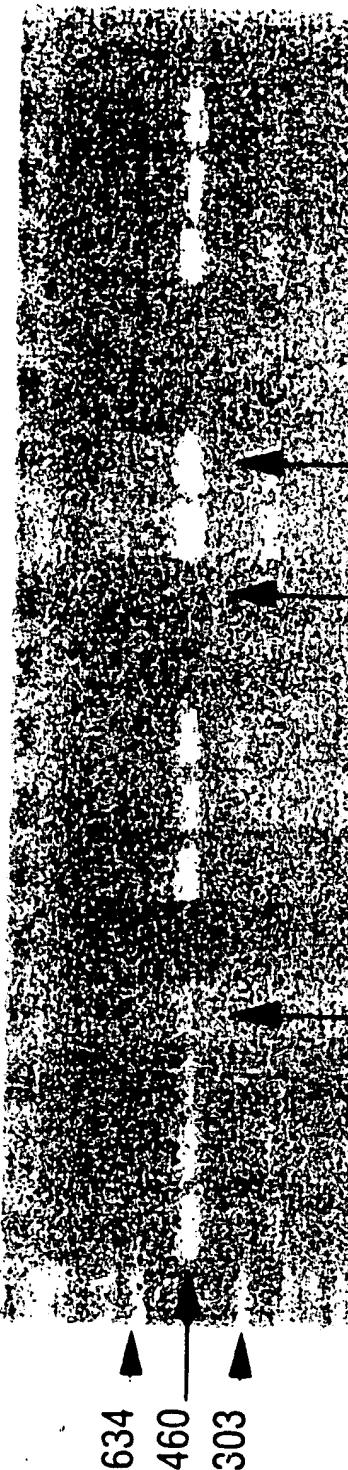
FIG. 9C



351 U.S.PTO
110204

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 14 of 33

LIQUID NAILS GLUE
BOND-ALL GLUE
GOOP GLUE
RUBBER CEMENT
CURED SILICONE SEALER
UV GLUE
VACUUM GREASE
SILICONE SPRAY
POLYAMIDE
RUBBER GASKET
REACTION VIAL PLASTIC
STAINLESS STEEL THERM.
WIRE THERMOCOUPLE
CRUSHED SILICON
SILICON WAFER
CRUSHED GLASS
GLASS CAPILLARY
CONTROL
LADDER



PCR RESULTS WITH STANDARD REAGENT AMOUNTS

FIG. 10



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 15 of 33

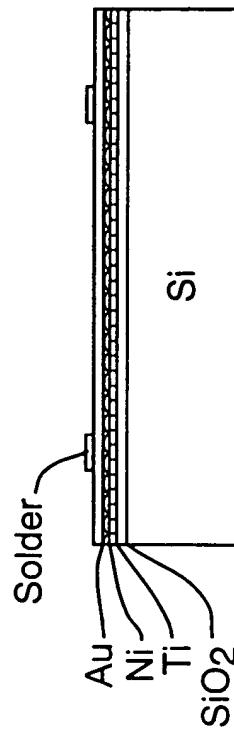
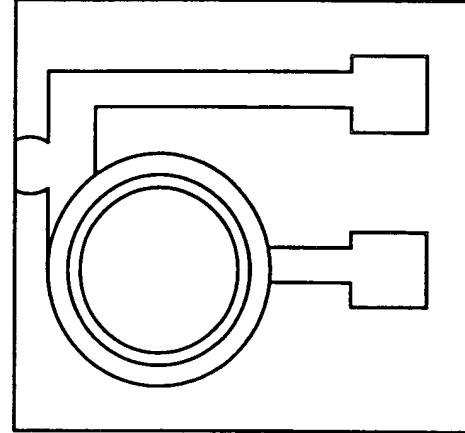


FIG.11



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 18 of 33

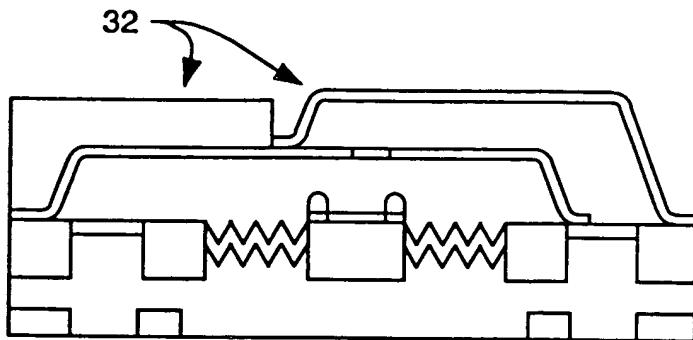


FIG. 12 H

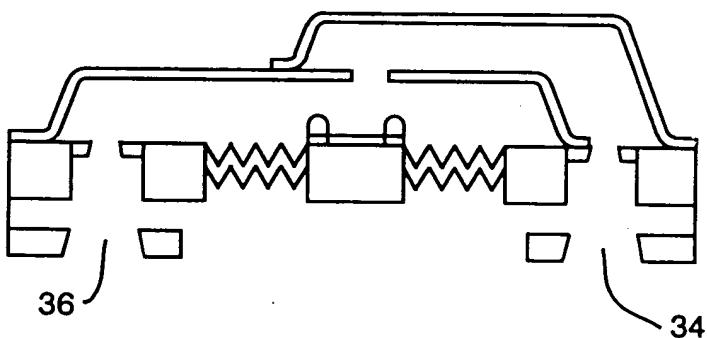


FIG. 12 I

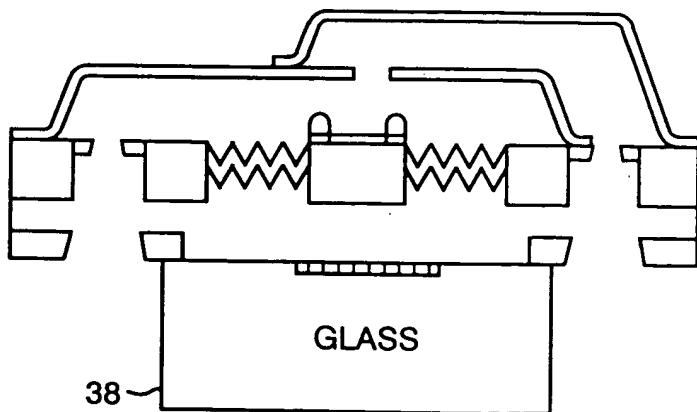


FIG. 12 J



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 17 of 33

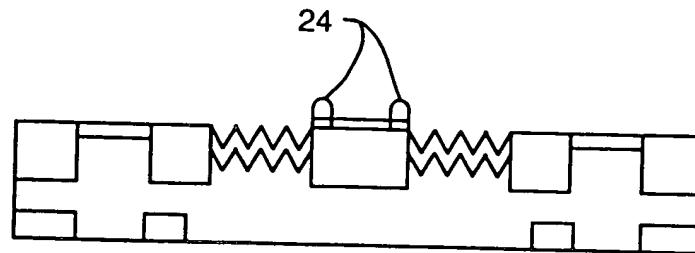


FIG. 12E

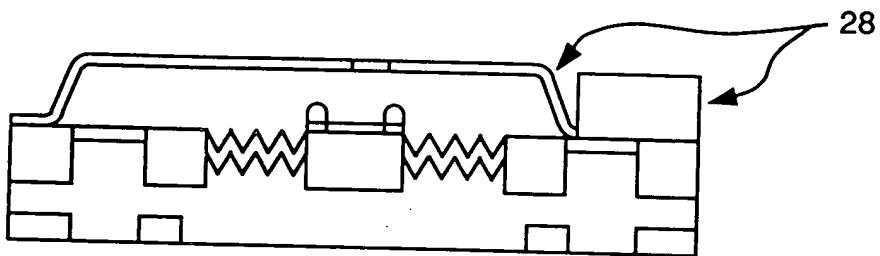


FIG. 12F

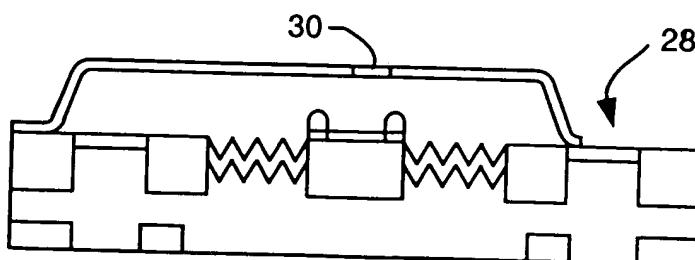


FIG. 12G



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 16 of 33

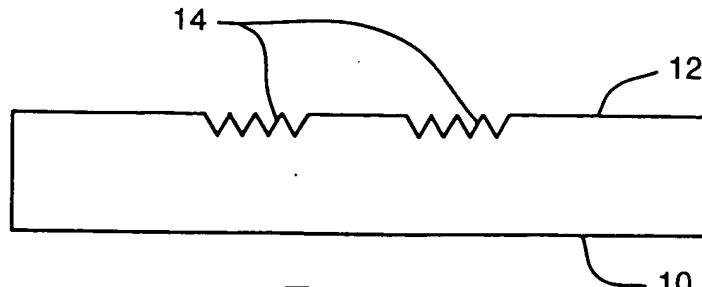


FIG. 12A

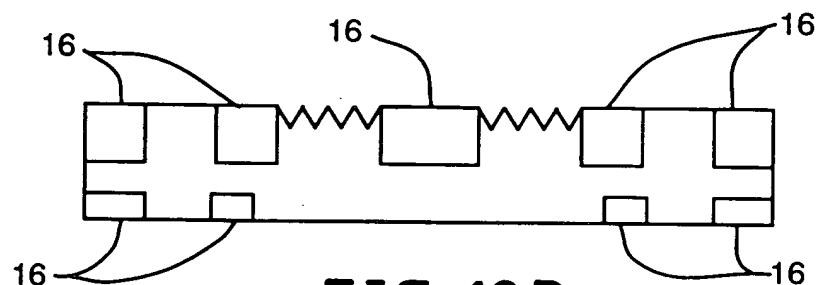


FIG. 12B

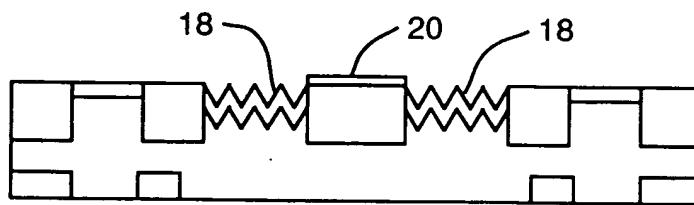


FIG. 12C

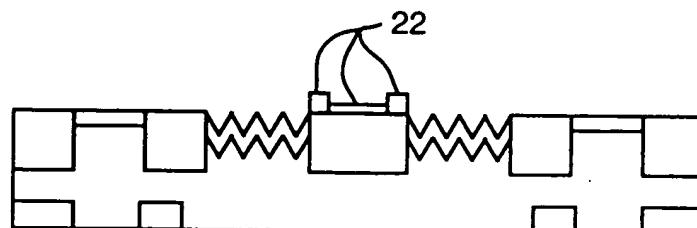


FIG. 12D



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 19 of 33

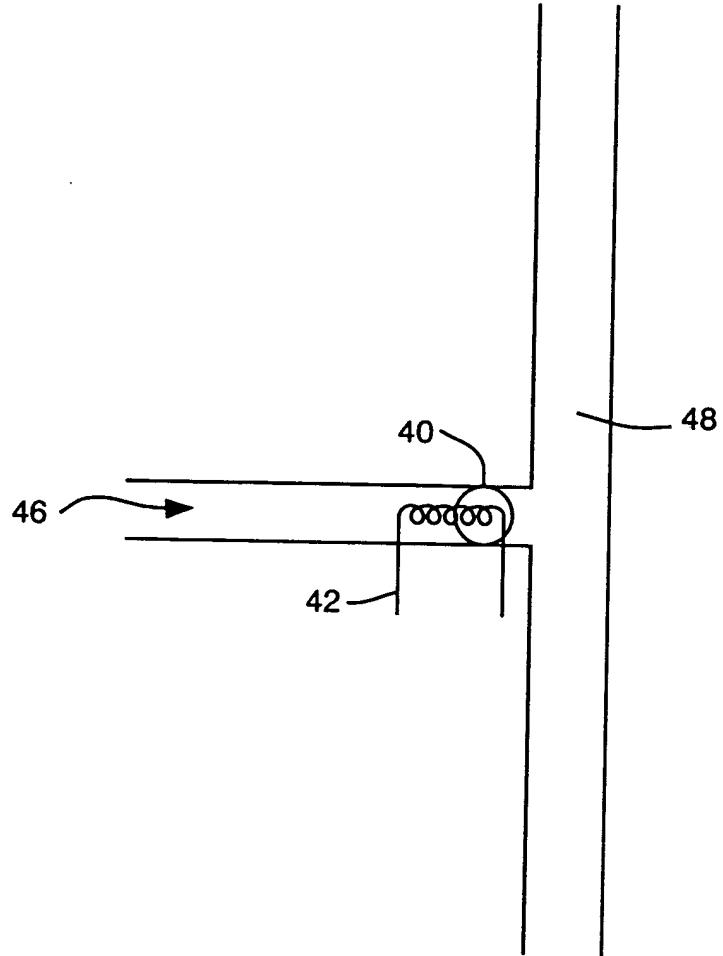


FIG.13

110204


18351 U.S.PTO

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 20 of 33

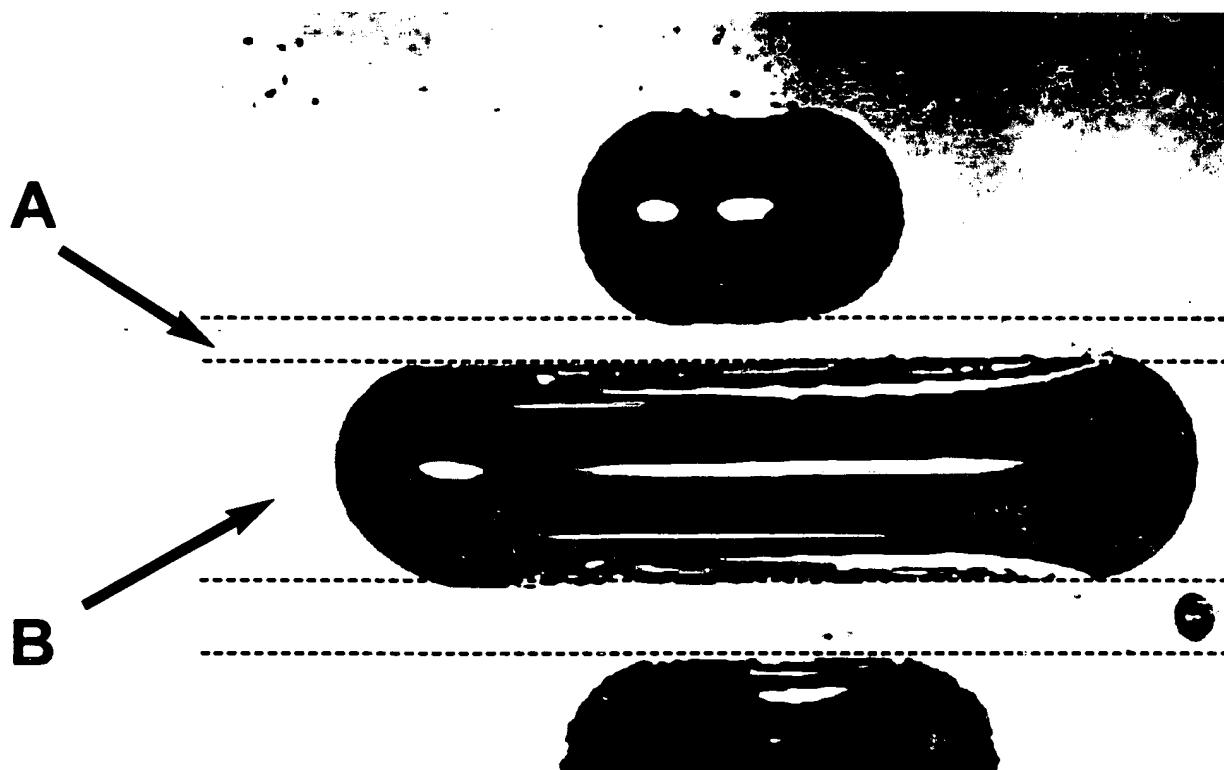


FIG. 14



18351 U.S. PTO

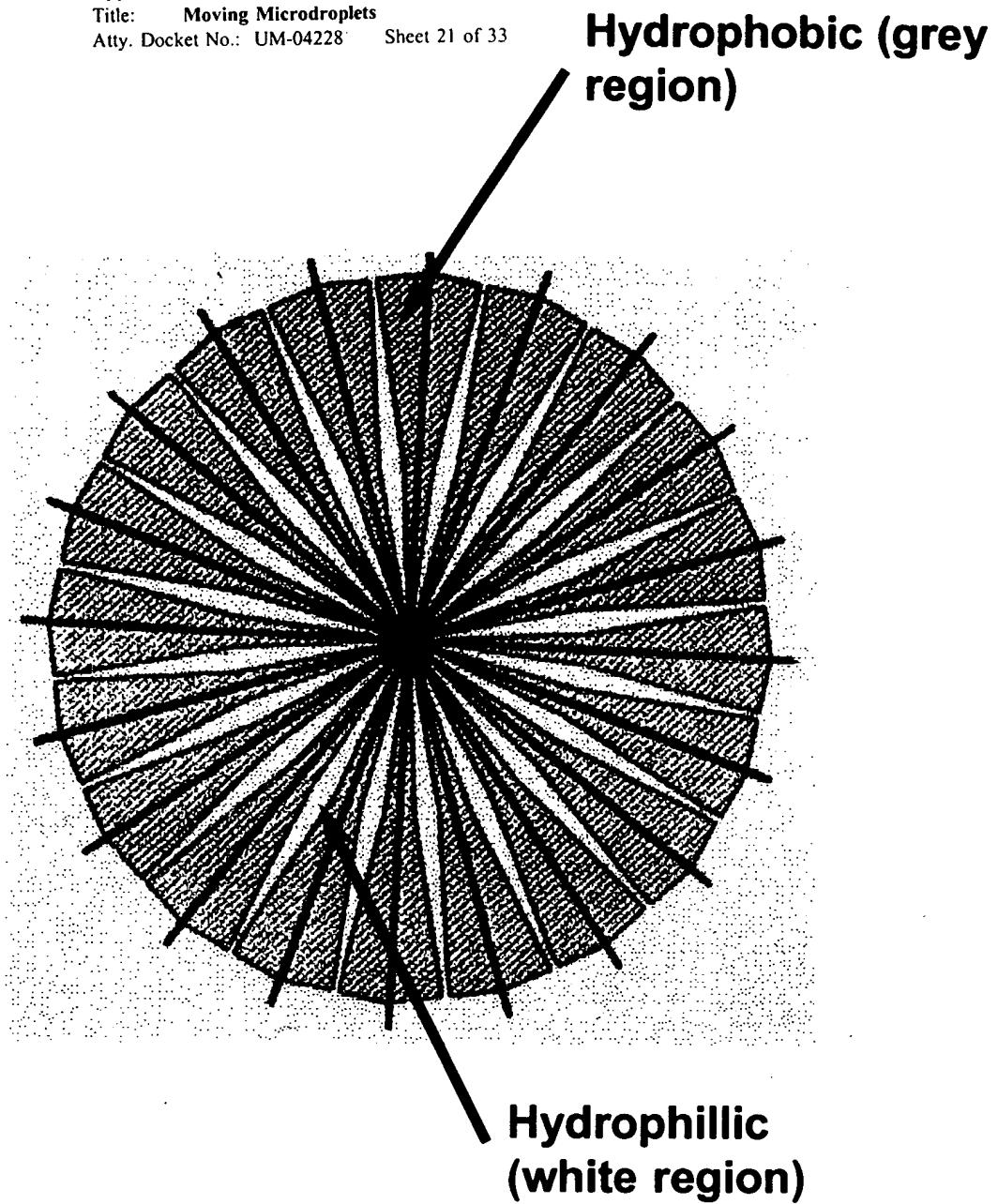


FIG. 15A



18351 U.S.PTO

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 22 of 33

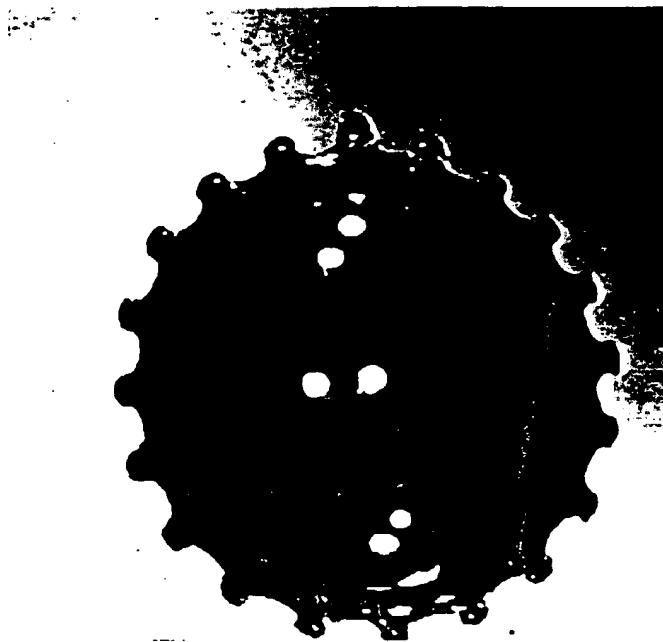


FIG. 15B



18351 U.S. PTO

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 23 of 33

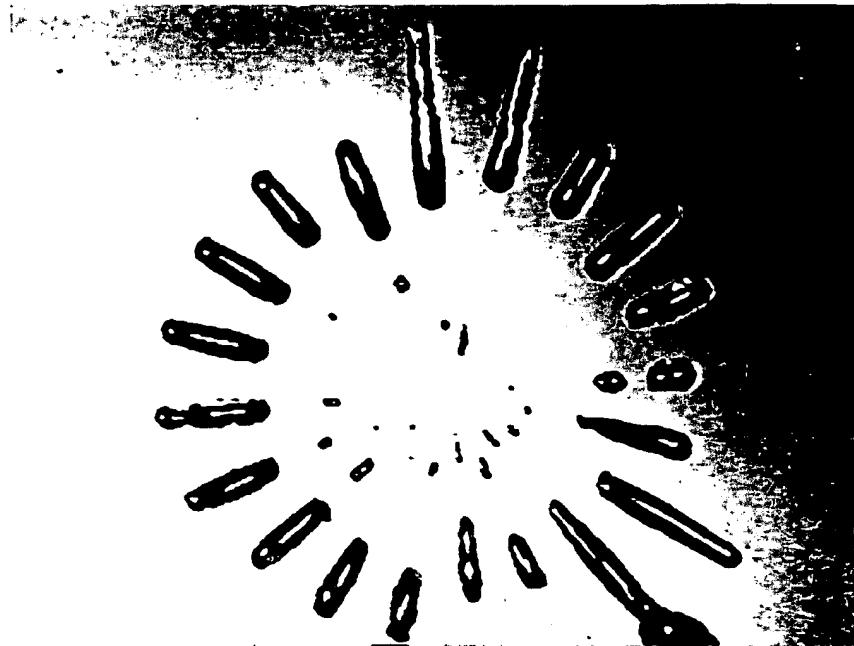
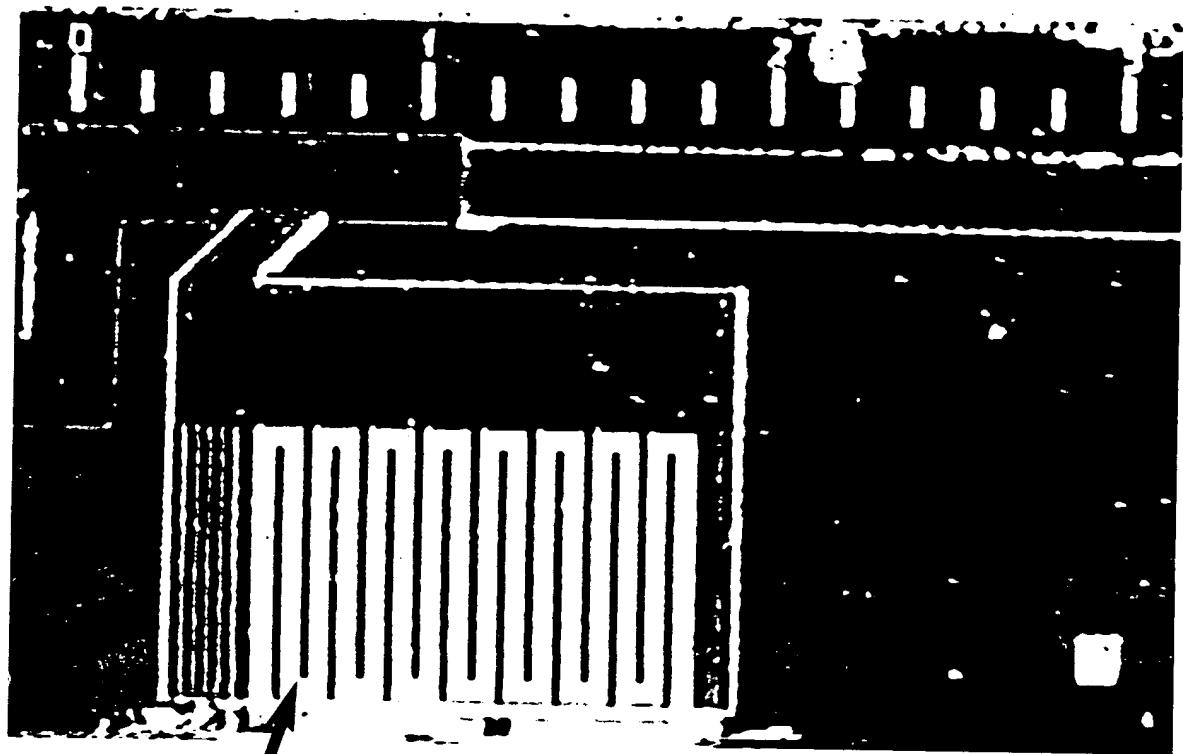


FIG. 15C



18351 U.S. PTO
110204

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 24 of 33

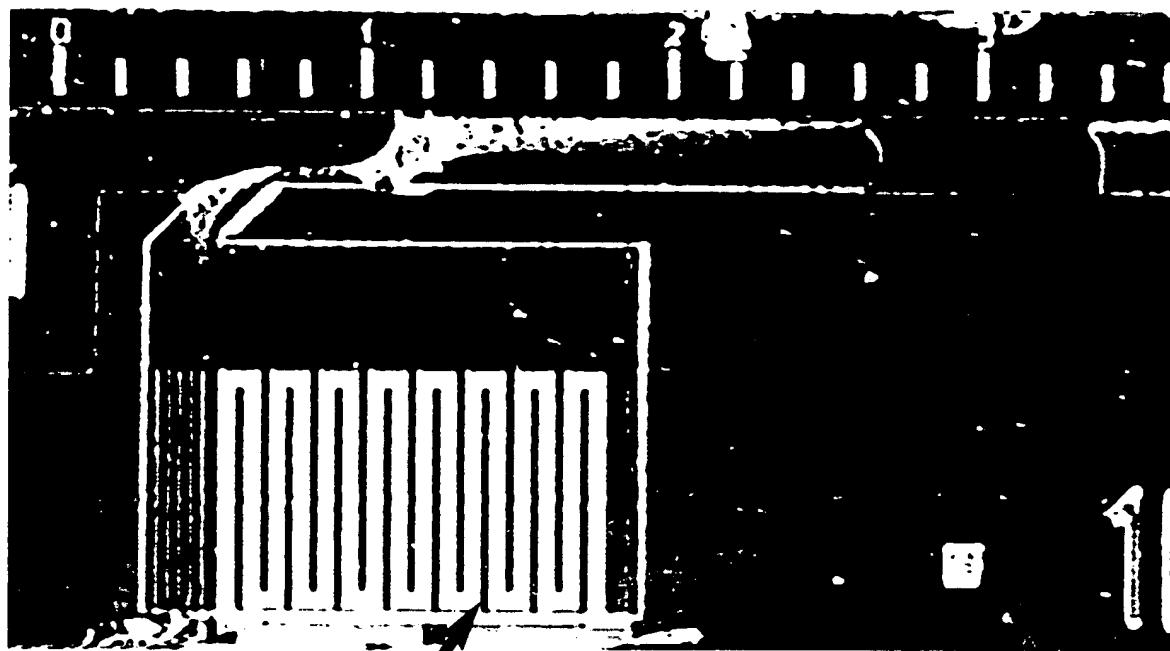


991

FIG. 16A

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 25 of 33

18351 U.S. PTO
110204

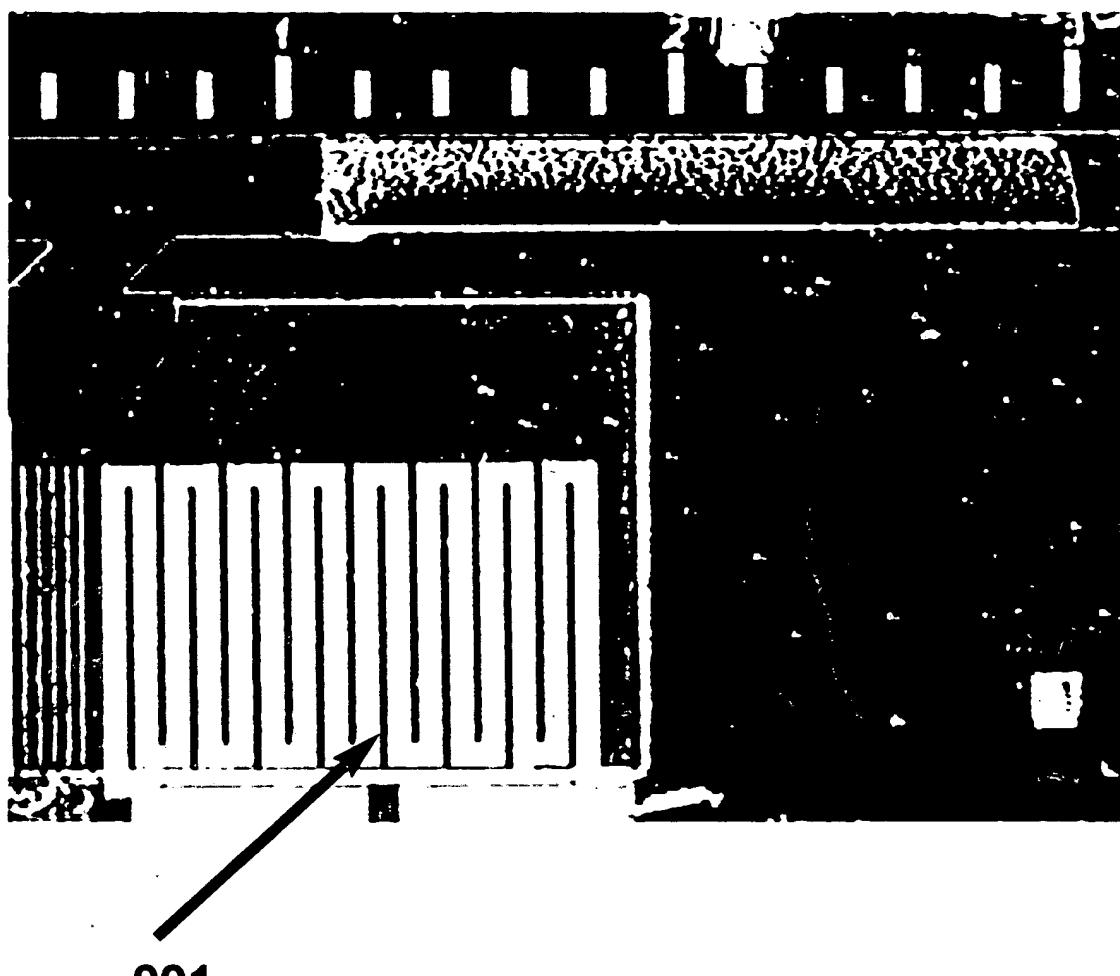


991

FIG. 16B

18351 U.S. PTO
110204

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 26 of 33



991

FIG. 16C



18351 U.S. PTO

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 27 of 33

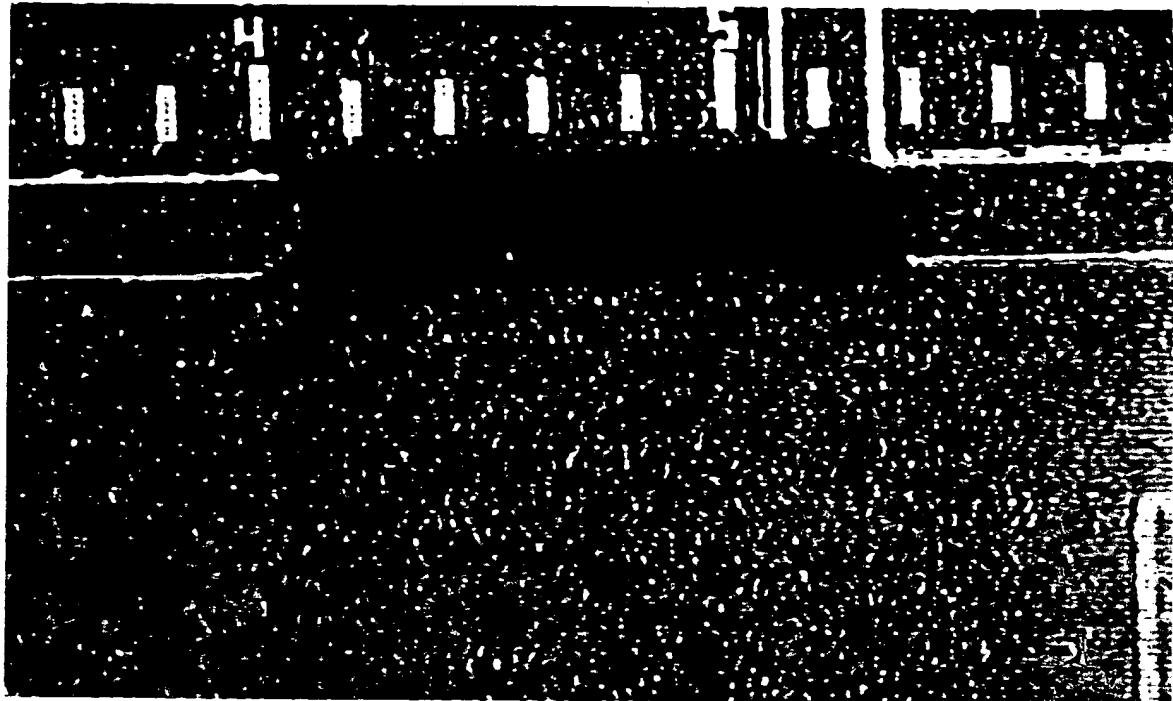


FIG. 16D



18351 U.S.PTO

Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 28 of 33

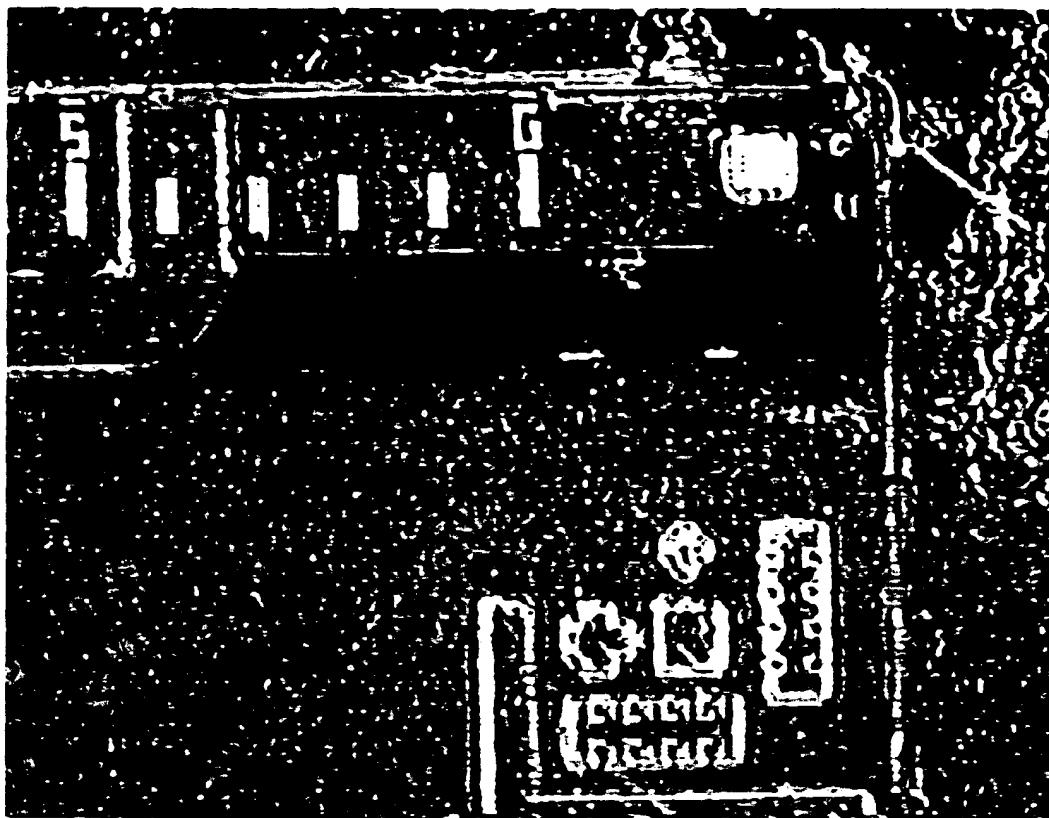
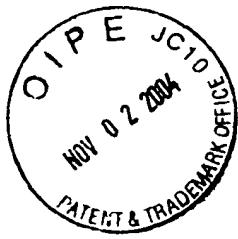


FIG. 16E



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 33 of 33

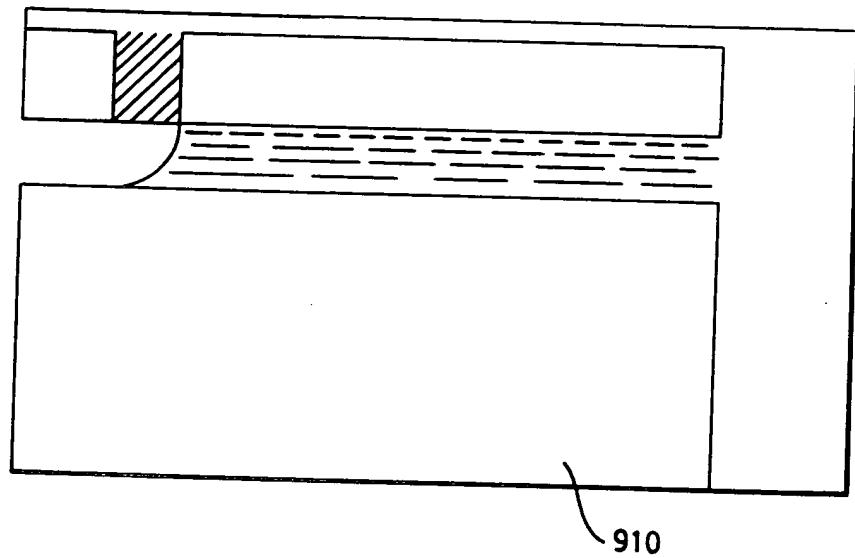
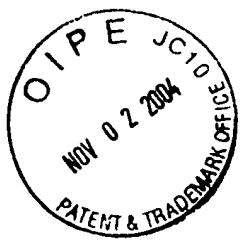


FIG. 16 J



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 32 of 33

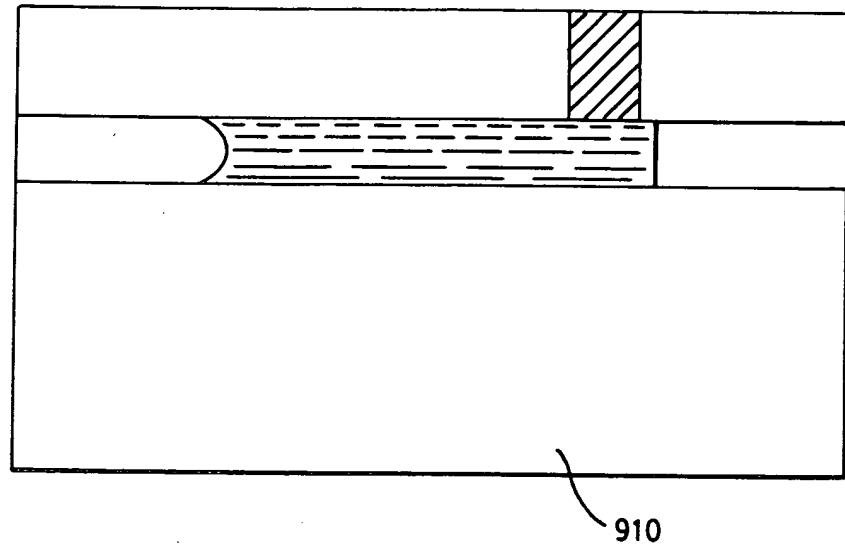
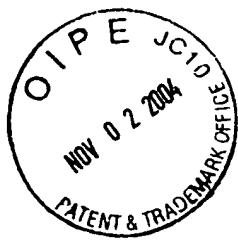


FIG. 16I



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 31 of 33

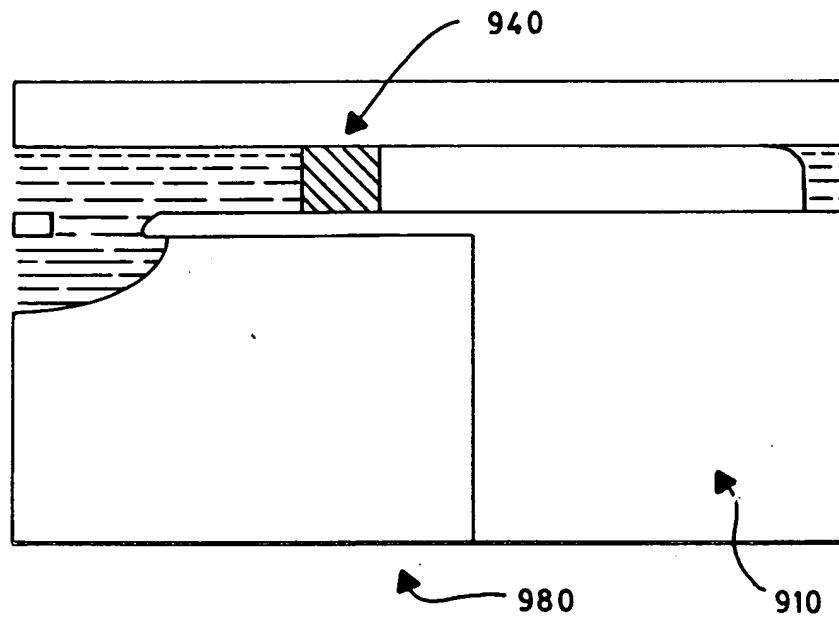
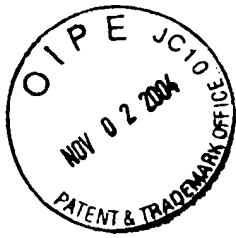


FIG. 16 H



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: **Moving Microdroplets**
Atty. Docket No.: UM-04228 Sheet 30 of 33

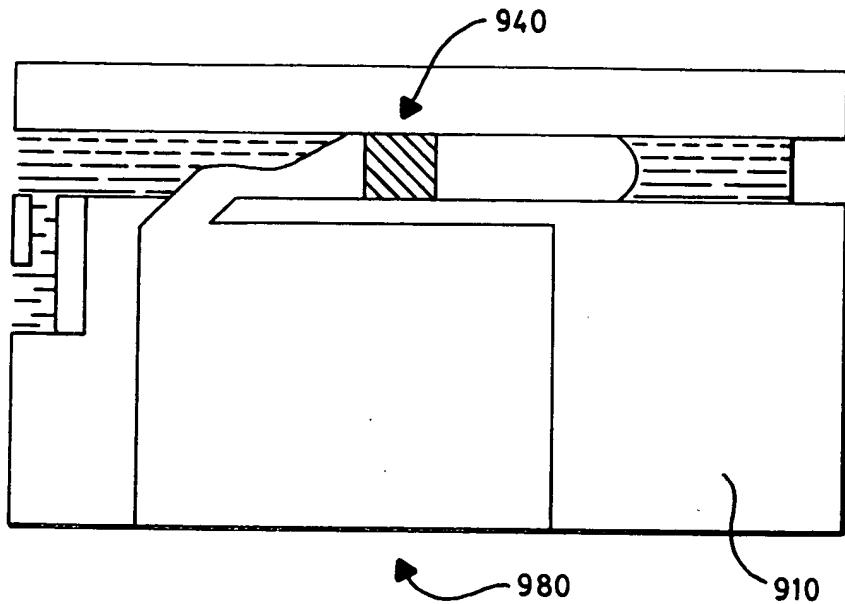


FIG. 16G



Serial No.: 09/518,895 Filed: 03/06/00
Examiner: J. Ludlow Group Art Unit: 1743
Applicant: Kalyan Handique *et al.*
Title: Moving Microdroplets
Atty. Docket No.: UM-04228 Sheet 29 of 33

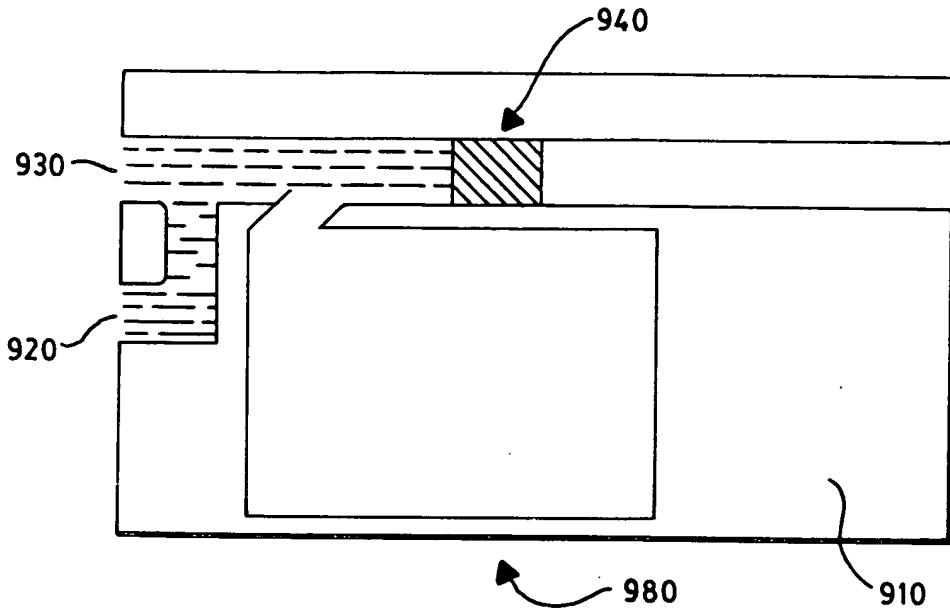


FIG. 16 F

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER: _____**

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.